Oracle Day 2 – SQL Types

Note: Please watch my YouTube sessions to better understand the descriptions and queries below

NiC IT Academy YouTube Videos for reference

🔵 Oracle SQL Tutorial - English

https://youtube.com/playlist?list=PLsphD3EpR7F9mmtY2jBt_O8Q9XmvrhQEF

🟡 Oracle SQL - தமிழில்

https://youtube.com/playlist?list=PLsphD3EpR7F-u4Jjp_3fYgLSsKwPPTEH4

📌 Oracle SQL Day wise Video: ENGLISH

Oracle SQL Day 1 – Introduction to Oracle - https://youtu.be/hLnKjYGr730

Oracle SQL Day 2 – SQL Types DDL, DML, DRL, DCL, TCL - https://youtu.be/XpgjXvnfZec

Oracle SQL Day 3 – Constraints in Oracle - https://youtu.be/TmYqeFfHyyc

Oracle SQL Day 4 – SELECT Statements in Oracle - https://youtu.be/tYQfBgUCpoI

Oracle SQL Day 5 – Single Row Functions in Oracle - https://youtu.be/4qJJxQuHLC4

Oracle SQL Day 6 – Joins in Oracle - https://youtu.be/CkaqluC2afE

Oracle SQL Day 7 – Aggregate Functions in Oracle - https://youtu.be/BSiCWzj-py8

Oracle SQL Day 8 – Sub Queries in Oracle - https://youtu.be/KtUCyG2cZe4

Oracle SQL Day 9 – SET Operators in Oracle - https://youtu.be/B0JbGbWsEIA

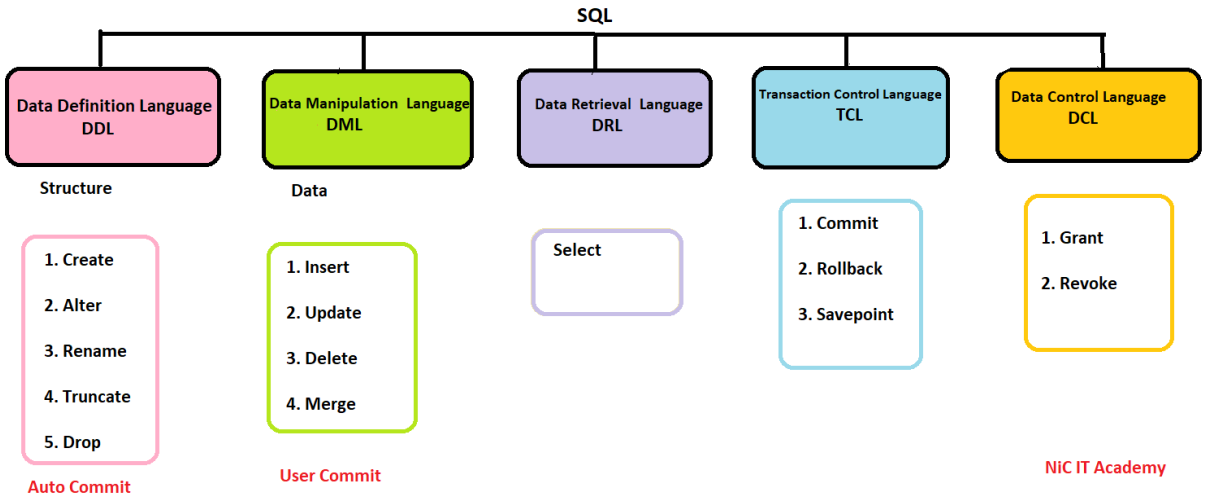
Oracle SQL Day 10 – Analytical Functions in Oracle - https://youtu.be/gRC3ndWLsoo

Oracle SQL Day 11 - Views in Oracle - https://youtu.be/m8a1UtOmd5k

Oracle SQL Day 12 - Indexes in Oracle - https://youtu.be/reL2O-kvNxc

Oracle SQL Day 13 - Regular Expression - https://youtu.be/k_Eo08vLPhU

SQL can be classified into 5 different languages




```
create table customer
(
cust_id number(6),
cust_name       varchar2(50),
mobile_no        number(10),
dob      date,
city      varchar2(30),
email_id varchar2(30)
);


select * from customer;


insert into customer
(cust_id,cust_name,mobile_no,dob,city,email_id)
values(100000,'Arun',    9090909090,to_date('08/04/2000','mm/dd/yyyy'),
          'Chennai','arun@gmail.com');
```

```
insert into customer
values(100001,'John',    9090909030,to_date('12/24/1986','mm/dd/yyyy'),
          'Bangaluru','john@gmail.com');

insert into customer
values(100002,'Geon',to_date('12/24/1985','mm/dd/yyyy'),       'Delhi','Geon@gmail.com');
-- SQL Error: ORA-00947: not enough values

insert into customer
(cust_id,cust_name,dob,city,email_id)
values(100002,'Geon',to_date('12/24/1985','mm/dd/yyyy'),       'Delhi','Geon@gmail.com');

rollback;

commit;

update customer
set mobile_no =7878787878;

rollback;

update customer
set mobile_no =7878787878 where cust_id=100002;

commit;

-- add a column

alter table customer
```

```
add country VARCHAR2(50);

select * from customer;

-- drop a column

alter table customer
drop column city;

update customer set country='India';

commit;

desc customer;

insert into customer
(cust_id,cust_name,mobile_no,dob,email_id,country)
values(1000000,'Dilip',9090909090,to_date('08/04/2000','mm/dd/yyyy'),'arun@gmail.com','india');
--ORA-01438: value larger than specified precision allowed for this column

CUST_ID        NUMBER(6)      number(8)

MOBILE_NO      NUMBER(10)   varchar2(15)

alter table customer
modify cust_id number(8);

alter table customer
modify cust_id number(6);
```

-- ORA-01440: column to be modified must be empty to decrease precision or scale

alter table customer

modify MOBILE_NO varchar2(15);

--ORA-01439: column to be modified must be empty to change datatype

-- one way

1. bkp a table

2. truncate base table

3. modify data type

4. Restore the data

5. drop bkp table

-- another way

1. Rename the table as bkp TABLE

2. create a main table with column data type

3. restore the data and VALIDATE

4. drop backup table

```
create table customer_bkp as select * from customer;

select * from CUSTOMER_BKP;

truncate table customer;

select * from customer;

rollback;

alter table customer
modify MOBILE_NO varchar2(15);

desc customer;

insert into customer (select * from customer_bkp);

commit;

select * from customer_bkp;
```

```
delete from customer_bkp;

rollback;

-- delete a partial record  from table

delete from customer_bkp where cust_id=100001;

commit;

drop table customer_bkp;



desc customer;

dob date_of_birth

alter table customer
rename column dob to date_of_birth;

rename customer to customer_data;

desc customer_data;



create table customer_test(no1 number(3), no2 number(3));

insert into customer_test values (1,2);
savepoint a;
```

```
insert into customer_test values (3,4);
savepoint b;
insert into customer_test values (5,6);
savepoint c;
insert into customer_test values (7,8);

rollback to c;

select * from customer_test

rollback;
```



```
desc CUSTOMER_DETAILS;

select * from CUSTOMER_DETAILS;

999999   99999999
```

Modify a column

```
alter table customer_details
modify cust_id number(8);
```

alter table customer_details

modify mobile_no varchar2(15);

-- ORA-01439: column to be modified must be empty to change datatype

bkp

truncate

modify

restore

create table customer_details_bkp as select * from customer_details;

select * from CUSTOMER_DETAILS_BKP;

create table customer_details_bkp1 as select * from customer_details where 1=2;

-- Truncate a table

truncate table customer_details;

-- Modify

alter table customer_details

modify mobile_no varchar2(15);

```
desc customer_details;

select * from customer_details;

insert into customer_details (select * from customer_details_bkp);

commit;

select * from customer_details_bkp;

-- Delete a record

delete from customer_details_bkp
where cust_id=100002;

rollback;

drop table customer_details_bkp;

select * from CUSTOMER_DETAILS_BKP;
```

truncate table customer;

delete from customer;

commit;

---

create a table

insert 1

update

insert 1

alter -- add a column

update

insert 1

alter -- add a column

update

insert

insert

rollback;

how many records will be there in the table?

---

insert into hr.customer_details values (100003,'Vijay',sysdate,9080706050,896745);

select * from customer_details;
